APPENDIX E

TRANSPORTATION ASSESSMENT AND FUTURE PLANNING

CONTENTS

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TRANSPORTATION ASSESSMENT AND FUTURE PLANNING

E.1. INTRODUCTION

This appendix provides information on highway, railway, and barge transportation type, capacity, location, and condition. Planned future development, construction, and operational changes are also addressed.

E.2. ROADWAY AND HIGHWAY

E.2.1 SUMMARY AND MAPPING

The proposed Depleted Uranium Hexafluoride (DUF6) Conversion Facility site is located in Pike County, Ohio, at the U.S. Department of Energy (DOE) Portsmouth Gaseous Diffusion Plant (PORTS). The site is served by Southern Ohio's two major highways: U.S. Route 23 and Ohio State Route 32 (Fig. E.1). These highways are located within 1 mile of the site. Access is by the Main Access Road, a four-lane interchange with U.S. Route 23, and the North Access Road, two lanes transitioning to four lanes with an at-grade interchange with Ohio State Route 32. These access routes easily accommodate plant site traffic flow. The site is 3.5 miles from the intersection of the U.S. Route 23 and Ohio State Route 32 interchange. Both routes are four lanes with U.S. Route 23 traversing north-south and Ohio State Route 32 traversing east-west. Two other access routes also serve the site. The East Access Road is a two-lane county road that disperses traffic to a county road network east and southeast of the plant. Access to Ohio State Route 32 is also available by this network. South Access Road is also a two-lane road that disperses traffic to the south and southeast. South Access Road also intersects U.S. Route 23 south of the site.

E.2.2 TRANSPORTATION DATA FOR LOCAL TRAFFIC AND HIGHWAYS

North Access Road has a daily traffic load of approximately 2383 vehicles. East Access Road has a daily traffic load of 802 vehicles. South Access Road has a daily traffic load of 1579 vehicles. The Main Access Road has a daily traffic load of 592 vehicles. (Traffic in both directions is included in these values.) These roads are congested during shift change; however, traffic flows at posted speed limits and a projected 40% increase in vehicles are feasible without staggering shifts or upgrades to roads. This data was provided by the Pike County Engineer's office from a 1999 traffic study. Load limits on these routes is controlled by the Ohio Revised Code at 85,000-lb gross vehicle weight. Special overload permitting is available.

U.S. Route 23 has an average daily traffic volume of 13,990 vehicles. Ohio State Route 32 has an average daily volume of 7420 vehicles (traffic in both directions is included in these values). U.S. Route 23 is at 60% of design capacity with Ohio State Route 32 at 40% of design capacity. This data was supplied by the Ohio Department of Transportation from a 1999 traffic study. Load limits on these

routes is controlled by the Ohio Revised Code at 85,000-lb gross vehicle weight. Special overload permitting is available. See Fig. E.1.

LEGEND

DOE RESERVATION

COMMUNITIES AND/OR INCORPORATED AREAS

GREENUP LOCK & DAM

Fig. E.1. Local transportation systems.

E.2.3 ROADWAY CAPACITIES (VOLUME AND LOAD LIMITS)

See Sect. E.2.2.

E.3. RAILWAY

E.3.1 SUMMARY AND MAPPING

Rail access is available at the proposed site. A rail spur from the western portion of the site connects to either of two major rail carriers, the CXS and Norfolk and Southern railways. See Fig. E.2 and Appendix B, Sect. 5.0, Cylinder Yard Storage Map, drawing X-200-3531-C, for rail lines.

E.3.2 TERMINAL STATUS AND CONDITION

No terminal building exists at the site. Rail spur service is available to the west side of the site. These spurs are in fair condition with the exception of the on site spur that requires upgrading.

E.4. BARGE

E.4.1 SUMMARY AND MAPPING

The proposed site at PORTS can be served by barge transportation via the Ohio River 22 miles south at Portsmouth, Ohio. See Fig. E.2 for location. Barge loading and unloading facilities are available for bulk materials and heavy unit loads. Additional barge facilities are located within 50 miles upstream and downstream of Portsmouth with a public road system for heavy hauling to the site.

E.4.2 TERMINAL STATUS AND CONDITION

The Portsmouth barge terminal bulk materials handling facility is in good condition. All heavy unit loading is by mobile crane or barge-mounted crane at an open air terminal. This terminal is 22 miles south of the proposed site and is located on US Route 52 West, 1 mile west of Portsmouth, Ohio.

E.5. PLANNED FUTURE CONSTRUCTION ACTIVITIES AND OPERATION CHANGES

E.5.1 PORTSMOUTH SITE

No significant construction additions are planned at the PORTS site. With the United States Enrichment Corporation announcement that enrichment activities will stop at PORTS, decontamination and decommissioning work is projected, as is re-industrialization of the facility. This work will be phased in nature and is expected to occur over a multiyear time period.

E.5.2 PORTSMOUTH (PIKETON) AREA

The Piketon area has no projections for extensive future industrial construction. Construction activities are projected to be limited to light commercial and residential development.

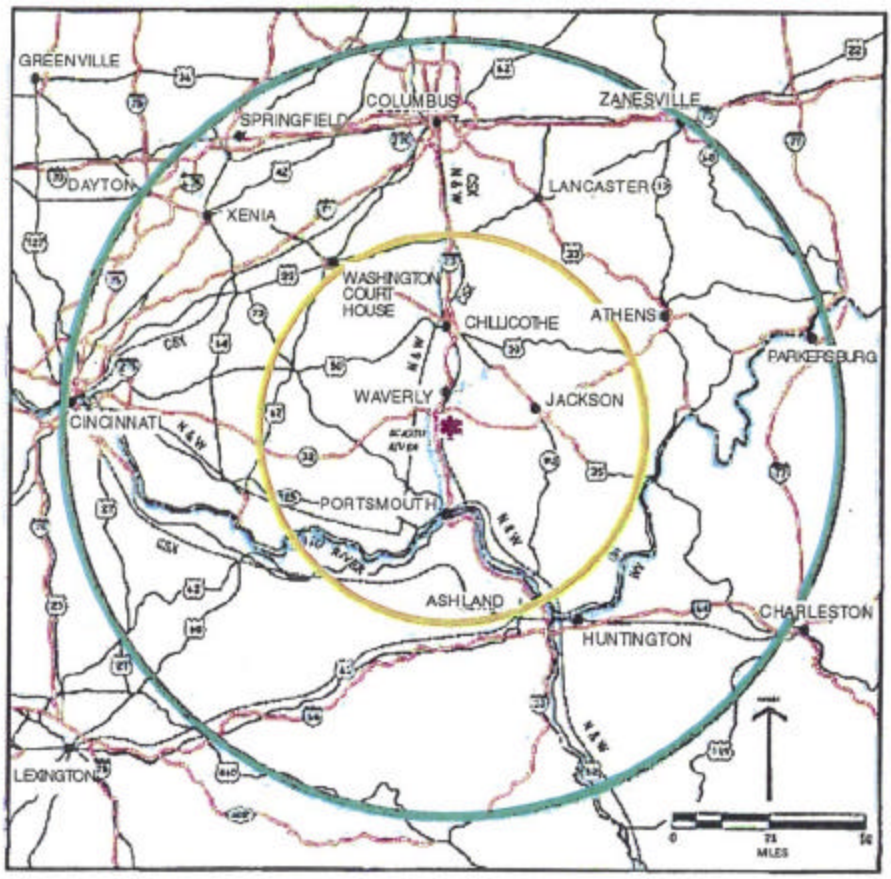

Fig. E.2. Transportation systems within 50 miles and 100 miles of the DOE reservation at Piketon, Ohio.